Draft ADEM Guidance
New Release Detection Requirements for Emergency Power Generator USTs

Existing underground storage tank systems (UST systems) that store fuel solely for use by emergency power generators have been exempt from the release detection requirements since 1989 when Alabama's regulations were first established. In accordance with EPA requirements, a change was made to Alabama's regulations on August 6, 2007 requiring all newly installed emergency power generator USTs to use interstitial monitoring for release detection, while the existing emergency generator USTs were still exempt from the release detection requirements.

On October 13, 2015 EPA finalized significant changes to the federal UST regulations. All states will have to change their UST regulations to be "no less protective" than EPA's regulations. Alabama's proposed UST regulation will now require owners and operators of all emergency power generator UST systems to meet release detection requirements no later than October 13, 2018, including those installed before August 6, 2007. This is the same as the federal EPA requirement.

What release detection methods can be used for emergency power generator tanks installed before August 6, 2007?
Owners and operators of emergency power generator USTs installed before August 6, 2007 must begin using at least one of these leak detection methods:

- Interstitial method – secondary containment with interstitial monitoring
- Internal methods – automatic tank gauging (ATG) systems; statistical inventory reconciliation (SIR); continuous in-tank leak detection
- External methods – monitoring for vapors in the soil; monitoring for liquids on the groundwater.

What release detection methods can be used to detect leaks from piping associated with emergency power generator USTs installed before August 6, 2007?
Pressurized piping installed before August 6, 2007 must meet the following requirements:

- The piping must have devices that will alert the operator to the presence of a leak by automatically shutting off or restricting the flow, or by triggering an audio or visual alarm.
- In addition, owners and operators must either conduct an annual line tightness test or use one of the following monthly methods:
  - Interstitial monitoring
  - Electronic line leak detectors
  - Groundwater monitoring
  - Vapor monitoring
  - Statistical inventory reconciliation.

If your emergency power generator UST has suction piping that operates at less than atmospheric pressure and is sloped so that the piping's contents will drain back into the storage tank if the suction is released and there is only one check valve in each suction line that is located directly below the suction pump, piping release detection is not required.

Suction piping that does not exactly match the characteristics above must use one of the monthly methods for pressurized piping, or tightness testing every three years.

Again, emergency power generator USTs installed after August 6, 2007 must use interstitial monitoring. Only emergency power generator UST systems installed before August 6, 2007 may use the other release detection methods listed above. Note that statistical inventory reconciliation may not be appropriate with some emergency power generator USTs because such systems may not have a way to accurately measure fuel use.

Finally, ADEM realizes the requirement to restrict or shut off flow of product in response to a piping leak may be problematic for emergency power generator tanks. Therefore, the above option allowing emergency power generator UST systems to use leak detection equipment that will alert the operator to the presence of a leak by triggering an audible or visual alarm without shutting off or restricting flow will be included in the Alabama emergency power generator regulation.

If there are any questions regarding release detection for emergency power generator USTs please call us at 334 270-5655.